# ADA Final Project Abstract

**AUTHORS:** Sam Hsu, and Sherly Boddu.

**PROPOSED TITLE:** Epidemiology of COVID-19 Among Adults in South Korea.

**BACKGROUND:**

Coronavirus Disease 2019 (COVID-19) remains responsible for 375,000 confirmed cases and 16,370 deaths globally.[1,2] COVID-19 causes mild symptoms of fatality, but the epidemiology is not well characterized. Hence, the aim is to identify demographic and regional characteristics that impact survival of COVID-19 in South Korea.[3-5]

**METHODS**:

A retrospective cohort study, using all diagnosed cases of COVID-19 in South Korea until April 14, 2020 from the Center for Disease Control South Korea, was performed.[7] Age, sex, and province were ~~covaritaes~~ with the outcome being survival days and released date. Descriptive analysis, density plots, Kaplan-Meier curves and log-rank tests were performed to understand the distribution. Cox-regression models were performed to determine the hazard of death based on covariates.

**RESULTS**:

Among 3,251 cases, 43.8% were male, and the mean age was 45.2 years. Majority (37.0%) of cases were from Gyeongsangbuk-do, and 2.0% were deemed deceased, 53.7% isolated and 44.3% released. After adjusting for age and sex, Gyeongi had a 0.07 (95% CI: 1.12-165.30) times higher hazard of death compared to Gangwon-do . Similarly, Gyeongsangbuk-do and Ulsan had a 3.18 (95% CI: 0.16-0.63), and 9.64 (95% CI: 0.01-0.86) higher hazard of death, respectively. Provinces were significant predictors of death.

**CONCLUSION:**

Age, and sex are not significantly associated with survivial days. However, provinces provide important information on the impact of COVID-19 in South Korea. Social distancing and isolation policies of these provinces may provide further explanation.

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